

IN THE CLAIMS:

The pending claims have been reiterated for the convenience of the Examiner.

Please cancel claim 12.

Please amend the claims as follows:

C 1  
C 2  
C 3  
C 4  
C 5  
C 6  
C 7  
C 8  
C 9  
C 10  
C 11  
C 12  
C 13  
C 14  
C 15  
C 16  
C 17  
C 18  
C 19  
C 20  
C 21  
C 22  
C 23  
C 24  
C 25  
C 26  
C 27  
C 28  
C 29  
C 30  
C 31  
C 32  
C 33  
C 34  
C 35  
C 36  
C 37  
C 38  
C 39  
C 40  
C 41  
C 42  
C 43  
C 44  
C 45  
C 46  
C 47  
C 48  
C 49  
C 50  
C 51  
C 52  
C 53  
C 54  
C 55  
C 56  
C 57  
C 58  
C 59  
C 60  
C 61  
C 62  
C 63  
C 64  
C 65  
C 66  
C 67  
C 68  
C 69  
C 70  
C 71  
C 72  
C 73  
C 74  
C 75  
C 76  
C 77  
C 78  
C 79  
C 80  
C 81  
C 82  
C 83  
C 84  
C 85  
C 86  
C 87  
C 88  
C 89  
C 90  
C 91  
C 92  
C 93  
C 94  
C 95  
C 96  
C 97  
C 98  
C 99  
C 100  
C 101  
C 102  
C 103  
C 104  
C 105  
C 106  
C 107  
C 108  
C 109  
C 110  
C 111  
C 112  
C 113  
C 114  
C 115  
C 116  
C 117  
C 118  
C 119  
C 120  
C 121  
C 122  
C 123  
C 124  
C 125  
C 126  
C 127  
C 128  
C 129  
C 130  
C 131  
C 132  
C 133  
C 134  
C 135  
C 136  
C 137  
C 138  
C 139  
C 140  
C 141  
C 142  
C 143  
C 144  
C 145  
C 146  
C 147  
C 148  
C 149  
C 150  
C 151  
C 152  
C 153  
C 154  
C 155  
C 156  
C 157  
C 158  
C 159  
C 160  
C 161  
C 162  
C 163  
C 164  
C 165  
C 166  
C 167  
C 168  
C 169  
C 170  
C 171  
C 172  
C 173  
C 174  
C 175  
C 176  
C 177  
C 178  
C 179  
C 180  
C 181  
C 182  
C 183  
C 184  
C 185  
C 186  
C 187  
C 188  
C 189  
C 190  
C 191  
C 192  
C 193  
C 194  
C 195  
C 196  
C 197  
C 198  
C 199  
C 200  
C 201  
C 202  
C 203  
C 204  
C 205  
C 206  
C 207  
C 208  
C 209  
C 210  
C 211  
C 212  
C 213  
C 214  
C 215  
C 216  
C 217  
C 218  
C 219  
C 220  
C 221  
C 222  
C 223  
C 224  
C 225  
C 226  
C 227  
C 228  
C 229  
C 230  
C 231  
C 232  
C 233  
C 234  
C 235  
C 236  
C 237  
C 238  
C 239  
C 240  
C 241  
C 242  
C 243  
C 244  
C 245  
C 246  
C 247  
C 248  
C 249  
C 250  
C 251  
C 252  
C 253  
C 254  
C 255  
C 256  
C 257  
C 258  
C 259  
C 260  
C 261  
C 262  
C 263  
C 264  
C 265  
C 266  
C 267  
C 268  
C 269  
C 270  
C 271  
C 272  
C 273  
C 274  
C 275  
C 276  
C 277  
C 278  
C 279  
C 280  
C 281  
C 282  
C 283  
C 284  
C 285  
C 286  
C 287  
C 288  
C 289  
C 290  
C 291  
C 292  
C 293  
C 294  
C 295  
C 296  
C 297  
C 298  
C 299  
C 300  
C 301  
C 302  
C 303  
C 304  
C 305  
C 306  
C 307  
C 308  
C 309  
C 310  
C 311  
C 312  
C 313  
C 314  
C 315  
C 316  
C 317  
C 318  
C 319  
C 320  
C 321  
C 322  
C 323  
C 324  
C 325  
C 326  
C 327  
C 328  
C 329  
C 330  
C 331  
C 332  
C 333  
C 334  
C 335  
C 336  
C 337  
C 338  
C 339  
C 340  
C 341  
C 342  
C 343  
C 344  
C 345  
C 346  
C 347  
C 348  
C 349  
C 350  
C 351  
C 352  
C 353  
C 354  
C 355  
C 356  
C 357  
C 358  
C 359  
C 360  
C 361  
C 362  
C 363  
C 364  
C 365  
C 366  
C 367  
C 368  
C 369  
C 370  
C 371  
C 372  
C 373  
C 374  
C 375  
C 376  
C 377  
C 378  
C 379  
C 380  
C 381  
C 382  
C 383  
C 384  
C 385  
C 386  
C 387  
C 388  
C 389  
C 390  
C 391  
C 392  
C 393  
C 394  
C 395  
C 396  
C 397  
C 398  
C 399  
C 400  
C 401  
C 402  
C 403  
C 404  
C 405  
C 406  
C 407  
C 408  
C 409  
C 410  
C 411  
C 412  
C 413  
C 414  
C 415  
C 416  
C 417  
C 418  
C 419  
C 420  
C 421  
C 422  
C 423  
C 424  
C 425  
C 426  
C 427  
C 428  
C 429  
C 430  
C 431  
C 432  
C 433  
C 434  
C 435  
C 436  
C 437  
C 438  
C 439  
C 440  
C 441  
C 442  
C 443  
C 444  
C 445  
C 446  
C 447  
C 448  
C 449  
C 450  
C 451  
C 452  
C 453  
C 454  
C 455  
C 456  
C 457  
C 458  
C 459  
C 460  
C 461  
C 462  
C 463  
C 464  
C 465  
C 466  
C 467  
C 468  
C 469  
C 470  
C 471  
C 472  
C 473  
C 474  
C 475  
C 476  
C 477  
C 478  
C 479  
C 480  
C 481  
C 482  
C 483  
C 484  
C 485  
C 486  
C 487  
C 488  
C 489  
C 490  
C 491  
C 492  
C 493  
C 494  
C 495  
C 496  
C 497  
C 498  
C 499  
C 500  
C 501  
C 502  
C 503  
C 504  
C 505  
C 506  
C 507  
C 508  
C 509  
C 510  
C 511  
C 512  
C 513  
C 514  
C 515  
C 516  
C 517  
C 518  
C 519  
C 520  
C 521  
C 522  
C 523  
C 524  
C 525  
C 526  
C 527  
C 528  
C 529  
C 530  
C 531  
C 532  
C 533  
C 534  
C 535  
C 536  
C 537  
C 538  
C 539  
C 540  
C 541  
C 542  
C 543  
C 544  
C 545  
C 546  
C 547  
C 548  
C 549  
C 550  
C 551  
C 552  
C 553  
C 554  
C 555  
C 556  
C 557  
C 558  
C 559  
C 560  
C 561  
C 562  
C 563  
C 564  
C 565  
C 566  
C 567  
C 568  
C 569  
C 570  
C 571  
C 572  
C 573  
C 574  
C 575  
C 576  
C 577  
C 578  
C 579  
C 580  
C 581  
C 582  
C 583  
C 584  
C 585  
C 586  
C 587  
C 588  
C 589  
C 590  
C 591  
C 592  
C 593  
C 594  
C 595  
C 596  
C 597  
C 598  
C 599  
C 600  
C 601  
C 602  
C 603  
C 604  
C 605  
C 606  
C 607  
C 608  
C 609  
C 610  
C 611  
C 612  
C 613  
C 614  
C 615  
C 616  
C 617  
C 618  
C 619  
C 620  
C 621  
C 622  
C 623  
C 624  
C 625  
C 626  
C 627  
C 628  
C 629  
C 630  
C 631  
C 632  
C 633  
C 634  
C 635  
C 636  
C 637  
C 638  
C 639  
C 640  
C 641  
C 642  
C 643  
C 644  
C 645  
C 646  
C 647  
C 648  
C 649  
C 650  
C 651  
C 652  
C 653  
C 654  
C 655  
C 656  
C 657  
C 658  
C 659  
C 660  
C 661  
C 662  
C 663  
C 664  
C 665  
C 666  
C 667  
C 668  
C 669  
C 670  
C 671  
C 672  
C 673  
C 674  
C 675  
C 676  
C 677  
C 678  
C 679  
C 680  
C 681  
C 682  
C 683  
C 684  
C 685  
C 686  
C 687  
C 688  
C 689  
C 690  
C 691  
C 692  
C 693  
C 694  
C 695  
C 696  
C 697  
C 698  
C 699  
C 700  
C 701  
C 702  
C 703  
C 704  
C 705  
C 706  
C 707  
C 708  
C 709  
C 710  
C 711  
C 712  
C 713  
C 714  
C 715  
C 716  
C 717  
C 718  
C 719  
C 720  
C 721  
C 722  
C 723  
C 724  
C 725  
C 726  
C 727  
C 728  
C 729  
C 730  
C 731  
C 732  
C 733  
C 734  
C 735  
C 736  
C 737  
C 738  
C 739  
C 740  
C 741  
C 742  
C 743  
C 744  
C 745  
C 746  
C 747  
C 748  
C 749  
C 750  
C 751  
C 752  
C 753  
C 754  
C 755  
C 756  
C 757  
C 758  
C 759  
C 760  
C 761  
C 762  
C 763  
C 764  
C 765  
C 766  
C 767  
C 768  
C 769  
C 770  
C 771  
C 772  
C 773  
C 774  
C 775  
C 776  
C 777  
C 778  
C 779  
C 780  
C 781  
C 782  
C 783  
C 784  
C 785  
C 786  
C 787  
C 788  
C 789  
C 790  
C 791  
C 792  
C 793  
C 794  
C 795  
C 796  
C 797  
C 798  
C 799  
C 800  
C 801  
C 802  
C 803  
C 804  
C 805  
C 806  
C 807  
C 808  
C 809  
C 810  
C 811  
C 812  
C 813  
C 814  
C 815  
C 816  
C 817  
C 818  
C 819  
C 820  
C 821  
C 822  
C 823  
C 824  
C 825  
C 826  
C 827  
C 828  
C 829  
C 830  
C 831  
C 832  
C 833  
C 834  
C 835  
C 836  
C 837  
C 838  
C 839  
C 840  
C 841  
C 842  
C 843  
C 844  
C 845  
C 846  
C 847  
C 848  
C 849  
C 850  
C 851  
C 852  
C 853  
C 854  
C 855  
C 856  
C 857  
C 858  
C 859  
C 860  
C 861  
C 862  
C 863  
C 864  
C 865  
C 866  
C 867  
C 868  
C 869  
C 870  
C 871  
C 872  
C 873  
C 874  
C 875  
C 876  
C 877  
C 878  
C 879  
C 880  
C 881  
C 882  
C 883  
C 884  
C 885  
C 886  
C 887  
C 888  
C 889  
C 890  
C 891  
C 892  
C 893  
C 894  
C 895  
C 896  
C 897  
C 898  
C 899  
C 900  
C 901  
C 902  
C 903  
C 904  
C 905  
C 906  
C 907  
C 908  
C 909  
C 910  
C 911  
C 912  
C 913  
C 914  
C 915  
C 916  
C 917  
C 918  
C 919  
C 920  
C 921  
C 922  
C 923  
C 924  
C 925  
C 926  
C 927  
C 928  
C 929  
C 930  
C 931  
C 932  
C 933  
C 934  
C 935  
C 936  
C 937  
C 938  
C 939  
C 940  
C 941  
C 942  
C 943  
C 944  
C 945  
C 946  
C 947  
C 948  
C 949  
C 950  
C 951  
C 952  
C 953  
C 954  
C 955  
C 956  
C 957  
C 958  
C 959  
C 960  
C 961  
C 962  
C 963  
C 964  
C 965  
C 966  
C 967  
C 968  
C 969  
C 970  
C 971  
C 972  
C 973  
C 974  
C 975  
C 976  
C 977  
C 978  
C 979  
C 980  
C 981  
C 982  
C 983  
C 984  
C 985  
C 986  
C 987  
C 988  
C 989  
C 990  
C 991  
C 992  
C 993  
C 994  
C 995  
C 996  
C 997  
C 998  
C 999  
C 999

7. (Amended) A kit [for screening recombinant enzymes, said kit] comprising at least one container containing a mixture of unpurified and uncharacterized [at least one protein having] enzym[atic]es, [activities] exhibiting a particular activity, obtained from at least one uncultured microorganism, said enzymes selected from the group consisting of oxidoreductase, transferase, hydrolase, lyase, isomerase and ligase.

8. (Amended) The kit of claim 7, wherein the [at least one protein] enzyme is further selected from the group consisting of enzymes which react with esters, amides, phosphate diesters, sulfate mono esters, aldehydes, ketones, alcohols, acetals, ketals, alkanes, olefins, aromatic rings, heteroaromatic rings, molecular oxygen and enols.

9. (Amended) The kit of claim 7, wherein the [at least one protein] enzyme is further selected from the group consisting of enzymes which are selected based on said enzyme's substrate specificity for structures which are [covalently attached to a functionality] selected from the group consisting of esters, amides, phosphate diesters, sulfate mono esters, aldehydes, ketones, alcohols, acetals, ketals, alkanes, olefins, aromatic rings, heteroaromatic rings, molecular oxygen and enols.

10. (Amended) The kit of claim 7, wherein the [at least one protein] enzyme is further selected from enzymes which produce a specific enantiomeric product.

11. (Amended) The kit of claim 7, wherein the [at least one protein] enzyme is further selected by molecular weight, isoelectric point, amino acid content and crystal structure.

12. (Canceled) The kit of claim 7, wherein the kit comprises at least two proteins having enzymatic activity.